5-Year Experience of Intramural Surgery in the Middle East: A Safety and Feasibility Analysis.

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Background

- Several studies have previously reported outcomes for per-oral esophagomyotomy (POEM) and per-oral pyloromyotomy (POP) in North-America and East-Asia
- However, evidence in the Middle East and North-Africa (MENA) population remains limited.
- The aim of this study was evaluate the feasibility and safety of POEM and POP for the management of gastrointestinal motility disorders (GMD) in the MENA region.

Methods

- This retrospective study included patients who underwent POEM or POP from January 2016 to September 2022 for the management of GMD.
- Intraoperative and postoperative outcomes were analyzed.

Results

- Ninety-seven patients underwent procedures, 50.5% were female with a mean overall age of 40.7 years.

Comorbidities	
Gastroesophagel Reflux (n,%)	(32) 32.9%
Hypertension (n,%)	(19) 20.0%
Type 2 Diabetes (n, %)	(14) 14.3%
Hyperlipidemia (n, %)	(14) 14.3%
Constipation (n, %)	(11) 11.3%

Results

- 71 (73.2%) were POEM and 26 (26.8%) were POP.
- The mean overall body mass index (BMI) was 25.7 kg/m^2.

Types of achalasia (POEM)	
Type 1 (n, %)	(12) 17%
Type 2 (n, %)	(44) 62%
Type 3 (n, %)	(5) 7.0%
Unspecified (n, %)	(10) 14.0%
Etiology of gastroparesis (POP)	
Idiopathic (n, %)	(19) 73.0%
Diabetes (n, %)	(4) 15.4%
Postsurgical (n, %)	(3) 11.6%

- 39 (54.9%) patients in the POEM group had previous interventions: (n=22, 30.9%) endoscopic balloon dilation, (n=10, 14.0%) botulinum toxin injections and (n=7, 9.8%) Heller-Dor operations.
- 1 (3.8%) patient in the POP group had intrapyloric botulinum toxin injections as a previous procedure.
- All cases were successfully completed endoscopically.
- The median operative times were 74 ±27.9 minutes for POEM and 38 ±22.1 minutes for POP.
- The median overall hospital stay was 1 ±2.7 days.

Results

Table 2. Complications within 30-days

Complications (POEM group)	-
Nausea/vomiting (n, %)	(2) 2.8%
Pneumomediastinum (n, %)	(2) 2.8%
Leaks (n, %)	(1) 1.4%
Complications (POP group)	17
Nausea/vomiting (n, %)	(2) 7.6%

- All complications were successfully managed.
- At a median follow-up 7 months there was one mortality, unrelated to the procedure (Cancer).

Conclusions

- POEM and POP procedures are safe and technically feasible with low complication rates.
- As expected, POEM resulted in longer operative times.
- Our study suggests that clinical success in the MENA population is comparable to larger international published series.
- Longer follow-up and larger trials are needed to validate this data.

Disclosures

- Authors have no conflicts of interest relevant to this publication.